University of Alberta

Psychosocial Adjustment in Emerging Adulthood: Focus on Indirect Aggression and Victimization

by

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Dedication

This thesis is dedicated to my fiancé, Shawn, without his unconditional love, respect, and confidence I never would have been able to get through this, and who has given me more than I could have ever hoped for. I also dedicate this thesis to all my friends and family who have shown me unlimited support and encouragement over the past two years. Finally, this thesis is dedicated to my parents, Antoon and Susanne, who have not only provided me with invaluable feedback, support, and encouragement throughout the development of my thesis, but also in all aspects of my life.

Abstract

This study examined the role of sex, gender role orientation, social representations of indirect aggression, and indicators of psychosocial adjustment in indirect aggression and victimization in an emerging adult sample. Forty-two participants (19 males and 23 females) completed the indirect subscale of the Direct and Indirect Aggression Scale, the Bem Sex Role Inventory, an indirect version of the EXPAGG, and the BASC-2 Self-Report College Form. A sub sample of 18 participants also completed journals regarding their daily social interactions. No sex differences were found for either indirect aggression or victimization. Indirect victimization was found to be the most significant predictor of indirect aggression. When controlling for indirect aggression, mania was the most significant predictor of indirect victimization. An inductive thematic analysis of the journals was conducted. The results were interpreted in relation to previous research and theory. Limitations, implications, and directions for future research were discussed.

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CHAPTER I

Introduction

Overview

Aggression, harassment, and bullying by peers are all major problems that most adolescents and emerging adults face everyday in their schools and in their communities. Aggression and bullying affect not only the victim and aggressor but the entire community. Indirect aggression is one of the most underreported types of bullying in schools (Qwens, Shute, & Slee, 2000). Indirect aggression is the manipulation of others and the social network in order to harm the victim (Lagerspetz, Bjorkqvist, & Peltonen, 1988). For example, indirect aggression involves social exclusion, ignoring, gossiping, talking behind someone's back, writing nasty notes, attempting to persuade others to dislike someone, and becoming friends with someone as a form of revenge (Osterman et al., 1994).

Several theories have been put forth to explain indirect aggression resulting in two distinct groups of theories. The first group of theories stems from the sociocultural perspective with some researchers explaining the phenomenon as resulting from the differential socialization of males and females (Crick, 1996; Lagerspetz, Bjorkqvist, & Peltonen, 1988), and other researchers relating indirect aggression to the cognitive and social development of the individual (Bjorkqvist, Lagerspetz, & Kaukiainen, 1991; Kaukiainen et al., 1999). Specifically, Bjorkqvist et al (1992) and Kaukiainen et al. (1999) postulated that there is a developmental trajectory of aggression with the way in which aggression is expressed developing from physical to verbal with an individual's

mastery of language, and from verbal to indirect with the development of social intelligence.

Another theory, stemming from evolutionary psychology, has been suggested by other researchers to provide an alternative explanation for indirect aggression (see Bjorklund & Pellegrini, 2000; Campbell, 1999, 2004). While this theory has a greater focus on females' use of indirect aggression, it does provide some potential insight into why males may be indirectly aggressive as well. The main tenet of this theory is that indirect aggression evolved as a form of aggression as it carried greater benefit and reduced cost for the aggressor than did direct (physical and verbal) aggression. Due to the nature of this type of aggression, the aggressor could destroy a rival's (usually in the competition for mates) reputation while promoting his or her own reputation. Indirect aggression according to this theory was used by aggressors to establish their position in social dominance hierarchies, which is similar to the use of physical aggression to establish oneself in physically-based dominance hierarchies typically seen in males of diverse species.

While these theories may have different roots, they are not necessarily mutually exclusive and may, when used together, provide a more complete explanation of indirect aggression. Historically, competition for mates within the sexes may have taken on different forms between the sexes as it was more essential for a woman than a man to survive in order to ensure the survival of her offspring (Bjorklund & Pellegrini, 2000; Campbell, 1999, 2004). The need in the intrafemale competition for mates for a type of aggression that ensured greater benefits and reduced costs may have been the original reason that an indirect form of aggression evolved; however, it is possible that a similar

explanation for the use of indirect aggression in today's society is still plausible. With the increased attention given to, and negative connotations associated with, direct forms of aggression, it is possible that indirect aggression has become the "best" choice for aggressors regardless of sex. Through the transmission of social and cultural variables and with the development of social intelligence, individuals regardless of sex, learn to use indirect aggression as a means of manipulating the social hierarchy in order to destroy a rival's reputation and to promote him- or herself within that given social hierarchy. Further, it is possible that certain psychosocial factors and behavioural characteristics may also carry significant explanatory power of indirect aggression and victimization. It follows that in order to explain this phenomenon in the best manner, an eclectic approach that takes into account evolutionary, sociocultural, and psychosocial variables seems most appropriate.

A seemingly singular research focus on sex differences in indirect aggression, and the psychosocial consequences thereof, has prevented any forward movement in the field beyond this area. This type of research focus while necessary and essential, especially in the early stages of research in any given field, should be supplemented by more sophisticated investigations entailing research in other aspects of the phenomenon, if progress beyond the current state of affairs is to be made. This view is shared by Moretti and Odgers (2006), who state, "The challenge for the field is to move beyond mere documentation of sex differences to develop theoretical models that can guide future research" (p. 373). Therefore, what is now needed in this field is a step forward, a step towards a greater and more comprehensive understanding of this form of aggression and victimization. Once we can better explain and predict indirect aggression we may be

better able to design and implement more effective prevention and intervention programs, and inform evidence-based practice with individuals in counselling, and psychotherapy settings.

Purpose of the Present Study

The main purpose of this study was to provide a more comprehensive understanding of indirect aggression and victimization in an emerging adult population by employing a multimethod approach. Such an approach was employed in order to move beyond the limitations encountered by previous studies, which have not considered the possibility of eliciting rich data from participants. Specifically, the goal of the present study was to determine whether indirect aggression/victimization may be better predicted by sociocultural variables including gender role orientation (masculine and feminine) and social representations of indirect aggression (instrumental versus expressive) than solely by biological sex. To explain and predict indirect aggression and victimization better, aggressors' and victims' self-perceptions of psychosocial adjustment and behaviour were investigated, and predictive patterns were determined. A further goal of this study was to present data on indirect aggression and victimization from a sample of emerging adults in an undergraduate setting. Few studies to date have examined indirect aggression and/or victimization in an emerging adult population in an educational setting.

CHAPTER II

Literature Review

For many years, theorists and researchers defined aggression primarily in physical terms, and consequently males have historically been regarded by researchers as more aggressive than females, giving rise to the myth of the non-aggressive female (Bjorkqvist

& Niemela, 1992). However, due to the more recent interest in the possibility of female aggression, and the emergence of a broader, less traditional view of aggression that challenges older definitions, a reconceptualization of aggression has occurred giving rise to the notion of indirect aggression (Bjorkqvist & Niemela, 1992).

While there has been overwhelming consensus for the direct aggression categories of physical and verbal aggression, such is not the case for indirect aggression. In ongoing efforts to provide a more complete definition of aggression, different groups of developmental researchers have inconsistently named and defined this more "social", meaning person-to-person, type of aggression. In the existing literature, this form of aggression has been referred to as indirect, social or relational aggression with distinctions between the three often blurred. Bjorkqvist (2001) argued that regardless of the name, these developmental researchers are all referring to the same phenomenon. Conversely, Archer (2001) suggested that while indirect aggression is social and relational, relational and social aggression are not necessarily indirect. Therefore, for the purposes of this study, and in the interest of reducing confusion between these related but essentially distinct forms of aggression, the focus will be on indirect aggression/victimization, and so will be referred to as such. To maintain this distinction, studies which profess to measure social or relational aggression will be identified when included.

Sex Differences in Indirect Aggression and Victimization

Previous studies which have set out to investigate sex differences in indirect aggression have yielded inconsistent results. It was reported in several studies that females are more indirectly aggressive than males (Bjorkqvist, 1994; Bjorkqvist,

Lagerspetz, & Kaukiainen, 1991; Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989; Lagerspetz, Bjorkqvist, & Peltonen, 1988; Osterman et al., 1998; Owens, Daly, & Slee, 2005; Rivers & Smith, 1994; Xie, Cairns, & Cairns, 2002). Other studies, however, have shown that males and females use similar amounts of indirect aggression (Osterman et al., 1994), whereas others have found females to be less indirectly aggressive than males (Peets & Kikas, 2006; Salmivalli & Kaukiainen, 2004). In a recent meta-analysis of sex differences in aggression, Archer (2004) found that differences tended to be either absent or small and in the female direction. However, the effect size observed depended on the type of measure used (observation, or teacher-, or peer-, or self-report) and was most significant for children under the age of 11. Further, males' use of indirect aggression appeared to catch up to females' by early adulthood. Furthermore, some research shows that girls are more likely than boys to be victimized by indirect aggression (Lagerspetz et al., 1988; Owens et al., 2005), though some others have shown adolescent males to be more victimized than females (Morales & Crick, 1999), or have found no gender differences (Crick & Grotpeter, 1996; Paquette & Underwood, 1999).

In light of the inconsistency in reported sex differences in indirect aggression and victimization it is necessary to go beyond such simple explanations in order to gain a more comprehensive understanding of indirect aggression. Social representations of aggression, or beliefs about aggression, is one mechanism by which biological predispositions and cultural influences may be translated into behaviour (Tapper & Boulton, 2004). Social representations are "the elaborating of a social object by the community for the purpose of behaving and communicating" (Moscovici, 1963, p. 251). Campbell, Muncer, and Coyle (1992) argued that women, in general, view aggression as

expressive, as being related to a loss of self-control that may lead to the breakdown of normal social interaction. On the other hand, they argued that men view aggression as instrumental, as being related to control over others, or as a way of achieving a goal. Individuals who view aggression as expressive tend to make excuses for their aggression while individuals who view aggression as instrumental tend to justify their aggression (Tapper & Boulton, 2000). Further, some researchers have claimed that social representations of aggression may act as a causal factor in observed levels of aggression (Archer & Haigh, 1996; Campbell, Muncer, & Gorman, 1993; Campbell, Sapochnik, & Muncer, 1997).

Several studies have been conducted to investigate sex differences in social representations of aggression, and the relationship between social representations and levels of aggression. Archer and Parker (1994) and Tapper and Boulton (2000) found that in children, females held more expressive representations of indirect aggression and males more instrumental representations of indirect aggression. Tapper and Boulton (2004) with a sample of children aged 7 to 11 found that social representations of aggression significantly predicted levels of aggression after controlling for sex and age. They found that instrumental representations predicted higher levels of indirect aggression and expressive representations predicted lower levels. This was especially true for females.

The notion of gender role orientation, as measured by the Bem Sex Role Inventory (BSRI; Bem, 1974) follows from Bem's gender schema theory, in which she postulated that: "sex-typing is derived, in part, from a readiness on the part of the individual to encode and to organize information – including information about the self –

in terms of the cultural definitions of maleness and femaleness that constitute the society's gender schema" (Bem, 1981, p. 369). Gender role orientation focuses on an individual's psychological gender that is dependent on culture, not solely on their biological sex. The BSRI utilizes a four-fold classification scheme: masculine (instrumental), feminine (expressive), androgynous, and undifferentiated. A masculine classification is related to a high endorsement of socially desirable masculine traits emphasizing a "cognitive focus on getting the job done", a feminine classification is related to a high endorsement of socially desirable feminine traits emphasizing an "affective concern for the welfare of others", an androgynous classification is related to high scores on both the masculine and feminine scales, and an undifferentiated classification to low scores on both scales (Bem, 1974, p. 156).

Thanzami and Archer (2005) conducted a study investigating the relationship of the BSRI and social representations of aggression. Employing a sample of 20- to 25-year-olds, they found that the masculinity scale of the BSRI was positively correlated with an instrumental social representation of aggression and negatively with an expressive social representation. Conversely, the feminine scale of the BSRI was found to be positively correlated with an expressive social representation of aggression and negatively correlated with an instrumental social representation. This finding thus indicates that masculinity as measured by the BSRI is related to an instrumental social representation of aggression, and femininity to an expressive social representation of aggression. These results further imply that gender role orientation rather than biological sex may be a better predictor of the type of social representation of aggression one holds, and that

perhaps when taken together, gender role orientation and social representation of indirect aggression, may better predict indirect aggression than biological sex.

Psychosocial Adjustment and Indirect Aggression and Victimization

Along with sex differences, gender role orientation, and social representations of indirect aggression, in-depth investigation of the self-perceptions of psychosocial adjustment and behaviour of indirect aggressors, victims, and aggressor/victims are critical as studies have shown both indirect aggression and victimization to be related to several personality, behavioural, social, and emotional factors. Indirect victimization has been found to be associated concurrently with anxiety, depression, drug use, aggression, delinquency, loneliness, peer rejection and post-traumatic stress (Bjorkqvist et al., 2001; Craig, 1998; Crick, Casas, & Nelson, 2002; Crick & Grotpeter, 1996; Crick, Ostrov, & Werner, 2006; La Greca & Harrison, 2005; Mynard, Joseph, & Alexander, 2000; Salmivalli, 1998, 2001; Storch & Masia-Warner, 2004; Sullivan, Farell, & Kliewer, 2006). Furthermore, in the few longitudinal studies available, indirect victimization predicted future problems with peer rejection and social phobia (Schafer, Werner, & Crick, 2002; Storch, Masia-Warner, Crisp, & Klein, 2005; Werner & Crick, 2004). Studies have been inconsistent with respect to whether gender moderates the association between indirect victimization and children's psychosocial adjustment. For example, indirect victimization concurrently predicted diverse negative outcomes such as aggression, delinquency, social phobia, depression, post-traumatic stress, loneliness, and peer rejection for both males and females (Crick & Bigbee, 1998; Storch & Esposito, 2003; Storch, et al., 2005; Sullivan et al., 2006), whereas indirect maltreatment was positively linked to marijuana use, physical aggression, social anxiety, and negatively

related to global self-worth only for girls (Crick & Bigbee, 1998; Paquette & Underwood, 1999; Sullivan et al., 2006).

Kaukiainen et al. (1999) found that indirect aggression correlated positively and significantly with social intelligence in 10-, 12-, and 14-year-olds, and that empathy correlated negatively and significantly with indirect aggression except in 12-year-olds. In another study, relational aggression was found to be related to social maladjustment, as aggressors tended to be disliked by peers whose ratings of their aggressiveness predicted the aggressors' social rejection six months later (Crick & Grotpeter, 1995). Aggressive girls in the same study reported greater loneliness and less social satisfaction than their non-aggressive counterparts, and relational aggression was found to be related to maladjustment over and above physical aggression. Xie, Swift, Cairns, and Cairns (2000 as cited in Underwood, 2004), however, found that social aggression was unrelated to negative outcomes in adolescence.

On the other hand, Bjorkqvist et al. (2001) found that indirect aggression may in fact be related to positive outcomes for some adolescents. Specifically, they found that more aggressive (physical, verbal, or indirect) males were more likely to be part of higher-ranking groups and were more likely to acquire higher ranks within those groups than their non-aggressive counterparts. For females, within-group rank correlated significantly with all three types of aggression; more aggressive girls achieved a higher rank in their group. Further, indirect aggression was associated with a lower probability of being alone and a higher within-group rank, and group rank was found to be less important than within-group rank.

Indirect Aggression and Victimization in Emerging Adulthood

Emerging adulthood, which occurs roughly during the ages of 18 to 25 in industrialized countries, is a transitional period between adolescence and adulthood (Arnett, 2007). It is a time of asserting independence, and exploration before making life commitments. According to Arnett, emerging adulthood is distinguished from other developmental periods by five characteristics: "Emerging adulthood is: 1. the age of identity exploration; 2. the age of instability; 3. the self-focused age; 4. the age of feeling in-between; and 5. the age of possibilities" (Arnett, 2007, p. 13). Identity exploration, the most salient characteristic of emerging adulthood, involves exploring the many possibilities in both love and work. Arnett (2000, 2004, 2007) argued that it is in emerging adulthood that most individuals go through Erikson's stage of identity versus role confusion. In Western societies, the period of adolescence along with its focus on identity, independence, self-absorption, and instability, has been extended into what used to be referred to as the age of young adulthood. Today 18- to 25-year-olds are not as they were in the past; that is, married with children and careers. Instead, they continue to explore their options and move from a life of dependence on their families to a life of independence. Given the characteristics of emerging adulthood and its similarities to adolescence and differences to adulthood, it follows that this developmental period is an especially important one in which to study indirect aggression and victimization.

While the study of indirect aggression and victimization has mostly been conducted with children and adolescents, a few studies looking at this type of aggression in adulthood do exist. The following is a brief review of those studies. In regards to college samples, Forrest, Eatough, and Shevlin (2005) found that indirect aggression was

negatively correlated with age (age ranged from 17 to 66). Further, they found no significant sex differences in indirect aggression or indirect victimization. Theron, Matthee, Steel, and Ramirez (2001) studied indirect and direct aggression in Spanish and South American females aged 18 to 22. They found that both groups expressed significantly more indirect aggression than direct aggression. In a study of male and female college students, empathy and social anxiety contributed uniquely to the prediction of relational aggression (Loudin, Loukas, & Robinson, 2003). Specifically, those students who feared negative evaluations from their peers and who possessed poor perspective taking skills were more likely to engage in relational aggression, regardless of gender. Moreover, males who rated low on empathy were more likely than other males and females to be relationally aggressive. Finally, in a study of young adult indirect aggression, it was found that in a forced-choice paradigm, women were more likely than men to choose retaliation in the form of attacking a classmate's reputation, especially by spreading gossip (Hess & Hagen, 2006).

Other settings in which indirect aggression and victimization have been investigated include the workplace and prisons. In a study of workplace victimization, Aquino and Bradfield (2000) found that both males and females high in negative affectivity reported greater frequency of being the victim of indirect aggression. Further, females perceived themselves to be the victims of indirect aggression more frequently than males. In a study of bullying and victimization in male and female prisoners, 39% (41% women, 38% men) reported indirect victimization and 34% (30% women, 37% men) reported indirect bullying (Ireland, Archer, & Power, 2007). There were no sex differences found in indirect bullying or indirect victimization with the exception of one

item "I have been gossiped about", which was reported by 26% of the women but only 14% of the men. Further, the proportion of individuals reporting indirect bullying was significantly higher than proportion reporting direct forms of bullying, regardless of sex. In a sample of male and female prisoners, Ireland and Archer (2002) found that males were more likely than females to report positive than negative consequences of employing indirectly aggressive strategies. Finally, in a sample of adult incarcerated males (over 21) and young male offenders (18 to 21) indirect aggression was reported slightly more frequently than direct aggression (Ireland & Power, 2004).

Given the lack of consistent findings in the previous literature, and the potential role that age plays in indirect aggression and victimization, it is critical to investigate more thoroughly different aspects of indirect aggression and victimization, including factors such as sex versus gender differences, and patterns of psychosocial adjustment and behaviour using a multimethod approach. By determining whether differences exist and whether specific patterns are more predictive of indirect aggression and victimization, we may be better able to identify those individuals at-risk for becoming aggressors, aggressor/victims or victims. We may also be better able to design effective prevention and intervention programs by increasing our understanding of the underlying variables of indirect aggression and victimization.

The Present Study

The primary purpose of this study was to provide a more comprehensive understanding of indirect aggression and victimization by employing a multimethod approach. To that end, there are several objectives of this study. The preliminary objective was to determine the frequency of aggressors, victims, and aggressor/victims in

the sample as very little previous research has been conducted with emerging adults in a postsecondary setting. After this was established and further preliminary analyses were conducted, sex differences in indirect aggression and victimization were investigated. Based on previous findings, it was predicted that there would either be no sex difference in reported indirect aggression or victimization or a small sex difference favouring females. Sex differences in the form of indirect aggression (e.g. exclusion versus spreading rumours) were also investigated. A further objective of this study was to explore a more complex explanation of these potential sex differences including the investigation of gender role orientation and social representations of aggression. It was hypothesized that emerging adult females, in general, would hold a more expressive social representation of indirect aggression than males, and males a more instrumental social representation. However, when controlling for sex, it was hypothesized that instrumental social representations would be predictive of higher reported levels of indirect aggression, and expressive social representations would be predictive of lower reported levels of indirect aggression. It was further predicted that regardless of sex, a masculine gender role orientation would be predictive of higher levels of indirect aggression, and a feminine gender role orientation would be predictive of lower levels of indirect aggression. Finally, it was hypothesized that social representations of indirect aggression and gender role orientation would be more predictive of reported levels of indirect aggression than participants' sex alone.

The final goal of this study was to investigate self-perceptions of psychosocial adjustment and behaviour in an emerging adult sample using multiple methods including a self-report questionnaire and open-ended journals. Specific psychosocial patterns of

behaviour for the sample as a whole with special focus on indirect aggressors, victims, and aggressor/victims were assessed. Further, similarities and differences amongst the groups were investigated.

CHAPTER III

Method

Participants

The sample consisted of 42 emerging adults enrolled in undergraduate programs at a large Western Canadian university. Nineteen males and 23 females participated in this study with age ranging from 18 to 25 ($M = 20.43$). While the majority of respondents self-identified as either Canadian or European, a minority self-identified as Asian. Participants were recruited through a Research Pool, a Residence Hall, and Undergraduate classes in the Faculty of Education.

Measures

Demographics. Participants were asked to indicate their sex, ethnicity, date of birth, and the date of graduation from high school (see Appendix A).

Indirect Aggression/Victimization. For the purposes of this study a revised self-report version of the 12-item indirect aggression subscale of the *Direct and Indirect Aggression Scales* (DIAS; Bjorkqvist, Lagerspetz, & Osterman, 1992) was given to participants who were asked to complete both the aggressor and victim versions of the scale (see Appendix B1 and B2). This scale has been shown to have good construct validity, internal consistency, and high internal reliability, with Cronbach's alphas ranging from 0.76 to 0.84 for the subscales, (Landau, Bjorkqvist, Lagerspetz, Osterman, & Gideon, 2002; Owens, Daly, & Slee, 2005).

Participants were asked to indicate the frequency with which they have experienced indirect aggression/victimization within the past year using the following 5-point Likert-type scale: Never (0), Seldom (1), Sometimes (2), Quite Often (3), and Very Often (4). In both versions of the scale a higher score reflected a greater frequency of either being an aggressor or of being a victim. In line with a great deal of research on aggression and victimization (e.g., Crick, Grotpeter, et al., 2002; Marini, Dane, Bosacki, & YLC-CURA, 2006), participants were classified as indirect aggressors or victims if their score exceeded one standard deviation above the mean on the aggression and victimization scales, respectively. Further, participants whose scores on both the aggression and victimization scales exceeded one standard deviation above the mean, were classified as aggressor/victims.

Social Representations of Aggression. To measure social representations of aggression, participants were asked to complete a revised version of the short EXPAGG (Driscoll, Campbell, & Muncer, 2005). The short EXPAGG was employed as it has been found to be more psychometrically sound than the original 16-item EXPAGG (Driscoll, et al., 2005). The short form contains a total of 10 items, consisting of a five-item instrumental scale and a five-item expressive scale. These scales have been shown to possess good construct validity and adequate internal consistency reliability with Cronbach's alphas of 0.78 for the instrumental scale and 0.63 for the expressive scale (Driscoll, et al., 2005).

For the purposes of this study, an indirect aggression version of the short EXPAGG was constructed using the five instrumental and five expressive items from Archer and Parker's (1994) indirect aggression version of the original EXPAGG that

corresponded to the direct aggression items on the short EXPAGG (see Appendix C). After pilot testing on 5 individuals who were not included in the final sample, several of the questions were reworded to improve clarity and to minimize confusion. Participants were asked to indicate using a 5-point Likert-type scale (ranging from *Strongly Disagree* to *Strongly Agree*), their agreement with the 10 EXPAGG items. Items 1 through 5 represent the expressive scale and items 6 through 10 the instrumental scale. The indirect aggression version of the EXPAGG, which was used in the present study demonstrated slightly lower internal consistency reliability than the original EXPAGG with Cronbach's alphas of 0.67 for the instrumental scale and 0.56 for the expressive scale.

Gender Role Orientation. The *Bem Sex Role Inventory* (BSRI; Bem, 1974) was developed to measure an individual's gender role orientation. The 60-item BSRI contains 20 Masculine, 20 Feminine, and 20 filler items. Participants total masculinity and femininity scores were calculated as this eliminated the need to artificially categorize distinct continuous variables (Choi & Fuqua, 2003). However, the hybrid method of classification, which is based on the median and the difference between participants' masculinity and femininity scores was employed in order to illustrate gender role orientation (masculine, feminine, androgynous, or undifferentiated) for a few select cases. Reliability of the BSRI has been reported to be acceptable with Cronbach's alpha coefficients ranging from 0.80 to 0.86, and test-retest reliability coefficients ranging from 0.76 to 0.94 (Choi & Fuqua, 2003). The BSRI has also been shown in several validation studies to possess adequate construct validity (see Hoffman & Borders, 2001).

Internalizing Problems, Inattention/Hyperactivity, and Personal Adjustment. The *Behavior Assessment System for Children,* Second Edition, Self-Report-College (BASC-2

SRP-Col; Reynolds & Kamphaus, 2004) was used to measure an individual's internalizing problems, inattention/hyperactivity, and personal adjustment, as well as several additional scales including anger control, mania, and ego strength. The BASC-2 SRP-Col is an omnibus inventory consisting of 185 items in which participants responded to items 1 through 68 using a true-false scale, and items 69 to 185 using a four-point Likert-type scale (*Never*, *Sometimes*, *Often*, and *Almost Always*).

The 17 BASC-2 SRP-Col scales investigated in this study consisted of Internalizing Problems (Sensation Seeking, Alcohol Abuse, School Maladjustment, Atypicality, Locus of Control, Social Stress, Anxiety, Depression, Sense of Inadequacy, Somatization, and Mania), Inattention/Hyperactivity Problems (Attention Problems, Hyperactivity), Personal Adjustment (Relations with Parents, Interpersonal Relations, Self Esteem, and Self Reliance), and Content Scales (Anger Control, Mania, Ego Strength). The scale is designed to measure both maladaptive (negative or undesirable) and adaptive (positive or desirable) characteristics and behaviours. For each scale, individuals' scores are compared with the normative sample and T scores ($M = 50$) are produced.

Both the composite scales and the individual scales of the BASC-2 SRP-Col have been shown to have good internal consistency and reliability, with Cronbach's alphas ranging from 0.84 to 0.96 and 0.67 to 0.96, respectively. Test-retest reliability has also been shown to be acceptable; 0.74 to 0.84 for the composite scales and 0.67 to 0.84 for the individual scales. The BASC-2 SRP-Col has also been shown to possess good convergent and construct validity.

Daily Journal. At the end of each day, for three consecutive days, a subset of the participants ($N = 18$) were asked to complete a daily journal (see Appendix D). On all three days, participants were asked to describe, and reflect on, their social interactions of that day, and to write in detail the positive and negative highlights of these interactions. On the third day, participants were asked to write any suggestions or ideas that they may have for indirect aggression/victimization prevention and intervention programs. Participants completed the journals using a paper and pencil format. The method as outlined by Braun and Clarke (2006) for conducting an inductive thematic analysis was followed in order to identify themes and patterns related to indirect aggression and victimization, and to act as a source of triangulation for the questionnaire data.

Procedure

Participants were recruited from three different populations including students living in residence, students participating in a research pool, and students attending undergraduate classes in the Faculty of Education at a large Western Canadian University. The procedure used to recruit participants varied slightly across populations.

Residence. Students who had been involved in a disciplinary case were asked if they would volunteer to participate in the study for which they received three hours of community service time. Study packages, which included an information sheet (see Appendix E1), a consent form (see Appendix F1), an instruction sheet (Appendix G), and all questionnaires and journals were dropped off at the main desk and were distributed and collected by a third party in order to help maintain anonymity.

Research Pool. Students participating in a research pool were provided with a brief description of the study and were asked to sign up online. Students attended an one

hour data collection session in which they were read the information sheet (Appendix E2) and consent form (Appendix F2), and instruction sheet (Appendix G2), and were given the option to complete an alternative assignment if they so desired. Participants completed all questionnaires, but were not asked to complete the journal section of the study given time constraints. Participants received one hour credit towards their required three hours of research participation.

Faculty of Education Undergraduate Classes. The principal investigator visited several undergraduate classes of professors willing to donate five minutes of class time. Students were read a brief description of the study and informed of all of their rights as participants. Those students who volunteered were then handed study packages, which included an information sheet (Appendix E1), a consent form (F1), and instruction sheet (Appendix G1), and returned them in class one week later.

All participants were given a study package which contained the indirect aggressor and victim versions of the revised DIAS, the BSRI, the revised short EXPAGG, the BASC-2 SRP-Col, the three day journal package (with the exception of those students from the research pool), and a debriefing sheet (Appendix H1 for residence and undergraduate classes and Appendix H2 for research pool) upon returning their packages. The order of the questionnaires was counterbalanced to control for order effects. To help maintain anonymity, a four-digit code was used for all questionnaires and journals. The four digit code did appear on the consent form; however, all consent forms and completed packages were stored separately.

CHAPTER IV

Results

Preliminary Analysis

The preliminary objective was to determine the frequency of aggressors, victims, and aggressor/victims in the sample as very little previous research has been conducted with emerging adults in a postsecondary setting. See Table 1 for a summary of frequencies and the percentage of individuals involved in indirect aggression and victimization.

Table 1

Frequencies and Percentages of Pure Indirect Aggressors, Victims, and Aggressor/Victims (N=42)

Classification	Frequency	Percentage of Total Sample	Percentage of Individuals Involved in Indirect Aggression
Indirect Aggressor	3	7.14	33.33
Indirect Victim	4	9.52	44.44
Indirect Aggressor/Victim	2	4.76	22.22
Uninvolved	33	78.57	

Means and standard deviations for the study variables are reported in Table 2 and Table 3. Means for the individual indirect aggression and indirect victimization items are also presented (see Figure 1). While the distribution for indirect aggression was slightly positively skewed (0.974) and leptokurtic (0.968), and the distribution for indirect victimization was also slightly positively skewed (0.436) and platykurtic (-0.225), these statistics were within acceptable limits indicating the distributions may be assumed to be

normal. It should be noted that all analyses were run on standardized scores unless otherwise indicated.

Table 2

Descriptive Statistics for Dependent Variables, Social Representations of Indirect Aggression, and Gender Role Orientation by Sex

Variable	Sex	*N*	*M*	*SD*
Age		42	20.43	2.38
	Male	19	20.47	2.39
	Female	23	20.39	2.43
Dependent Variables				
Indirect Aggression		42	1.19	0.66
	Male	19	0.06	1.25
	Female	23	-0.05	0.76
Indirect Victimization		42	0.89	0.58
	Male	19	-0.13	0.95
	Female	23	0.11	1.05
Social Representations of Indirect Aggression				
Expressive		42	3.16	0.82
	Male	19	-0.08	1.25
	Female	23	0.07	0.76
Instrumental		42	2.78	0.86
	Male	19	-0.04	0.86
	Female	23	0.32	1.12
Gender Role Orientation				
Femininity		42	4.78	0.76
	Male	19	-0.27	0.98
	Female	23	0.22	0.98
Masculinity		42	4.60	0.66

	Male	19	0.08	1.13
	Female	23	-0.06	0.90

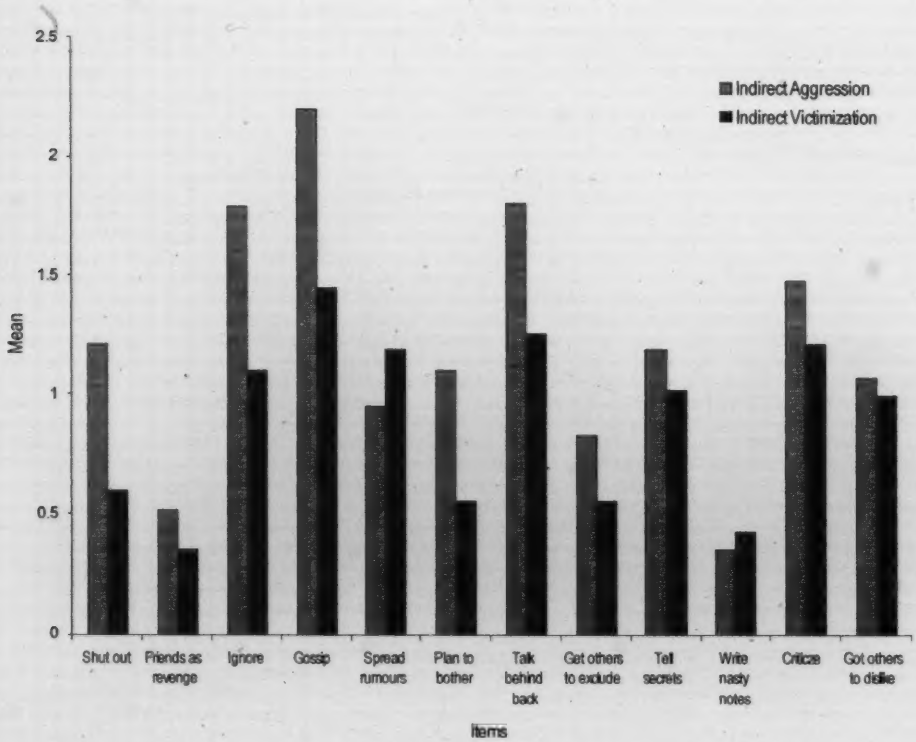
Table 3

Descriptive Statistics for BASC-2 SRP-Col Variables (T Scores)

Variable	*N*	*M*	*SD*
Internalizing Problems			
Sensation Seeking	41	48.95	10.58
Alcohol Abuse	41	50.46	9.42
School Maladjustment	41	57.46	9.19
Atypicality	41	50.78	8.67
Locus of Control	41	49.80	9.96
Social Stress	41	49.61	8.22
Anxiety	41	50.83	9.91
Depression	41	48.02	5.83
Sense of Inadequacy	41	48.98	9.85
Somatization	41	49.90	8.87
Inattention/Hyperactivity			
Attention Problems	41	51.29	10.53
Hyperactivity	41	50.98	9.63
Personal Adjustment (Positive)			
Relations with Parents	41	49.59	8.31
Interpersonal Relations	41	49.71	7.35
Self Esteem	41	50.76	10.21
Self Reliance	41	47.34	7.44
Content Scales			

Anger Control	41	50.83	7.48
Mania	41	50.73	10.23
Ego Strength (Positive)	41	49.27	8.84

Figure 1. Mean values for indirect aggression and victimization items based on raw scores ($N = 42$).



Inter-correlations between indirect aggression, indirect victimization and independent variables which were found to be significantly related are presented in Table 4. As can be seen, there was a positive moderate correlation between indirect aggression and indirect victimization indicating that as indirect aggression increased, indirect victimization increased, and vice versa. A significant moderate and positive correlation between indirect aggression and instrumental representations of aggression and sensation

seeking was also found. This suggests that as scores on instrumental social representations of aggression and sensation seeking increased, indirect aggression scores also increased. Indirect victimization was significantly correlated with hyperactivity, sensation seeking, and mania. In all three cases, as scores on hyperactivity, sensation seeking, and mania increased, scores on indirect victimization also increased. Finally, age was significantly, negatively related to instrumental social representations of aggression, hyperactivity, sensation seeking, and mania. Therefore, in this sample as age increased, scores on instrumental social representations of aggression, hyperactivity, sensation seeking, and mania decreased.

Table 4

Intercorrelations between Indirect Aggression, Victimization, Gender Role Orientation, Social Representations of Indirect Aggression and Significant Psychosocial Adjustment Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Age	-	-0.18	-0.05	0.06	-0.23	0.04	-0.33*	-0.51**	-0.34**	-0.42**
2. Indirect Aggression		-	0.50**	-0.18	0.15	0.02	0.44**	0.24	0.39*	0.15
3. Indirect Victimization			-	-0.8	0.17	0.29	0.40**	0.31*	0.35*	0.39*
4. Femininity				-	-0.06	0.01	-0.04	0.10	-0.10	0.05
5. Masculinity					-	0.20	0.15	0.09	0.32*	0.01
6. Expressive Social Representation						-	0.07	-0.11	0.08	-0.05
7. Instrumental Representation							-	0.18	0.37*	0.24

8. Hyperactivity	-	0.36*	0.72**
9. Sensation Seeking		-	0.22
10. Mania			-

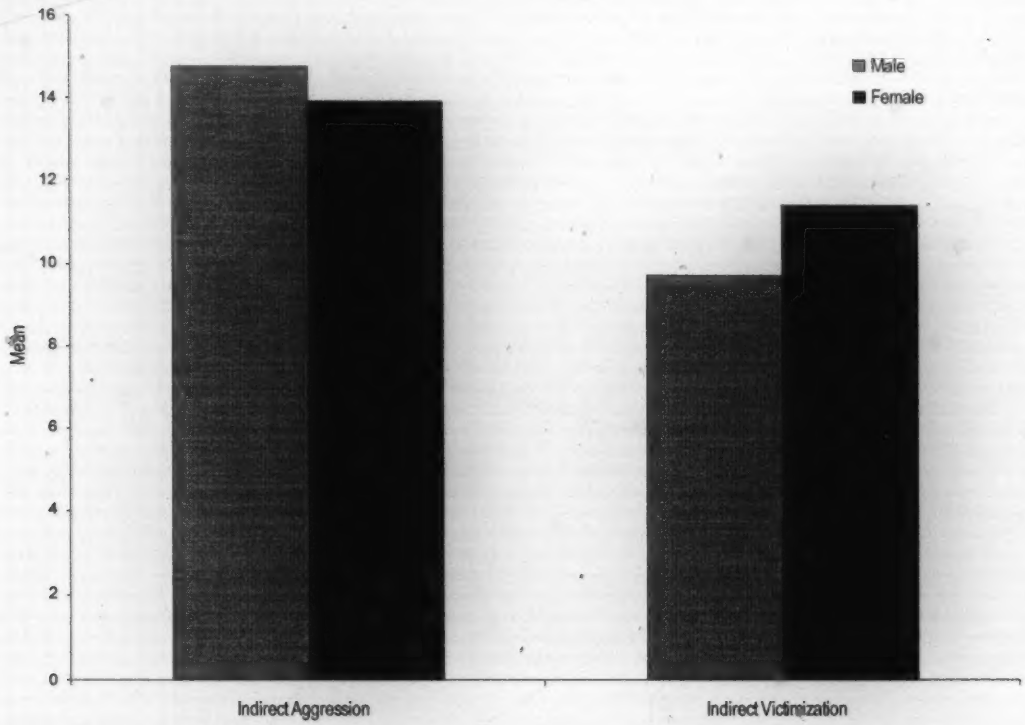
Note. ** $p < 0.001$, * $p < 0.05$

Main Analysis

Sex Differences. Based on previous findings, it was predicted that there would either be no sex difference in reported indirect aggression or victimization or a small sex difference favouring females. Sex differences in the form of indirect aggression (e.g. exclusion versus spreading rumours) were also investigated. A further objective of the present study was to explore a more complex explanation of potential sex differences in indirect aggression and victimization including the investigation of gender role orientation and social representations of aggression. It was hypothesized that emerging adult females, in general, would hold a more expressive social representation of indirect aggression than males, and males a more instrumental social representation. However, when controlling for sex, it was hypothesized that instrumental social representations would be predictive of higher reported levels of indirect aggression, and expressive social representations would be predictive of lower reported levels of indirect aggression. It was further predicted that regardless of sex, a masculine gender role orientation would be predictive of higher levels of indirect aggression, and a feminine gender role orientation would be predictive of lower levels of indirect aggression. Finally, it was hypothesized that social representations of indirect aggression and gender role orientation would be more predictive of reported levels of indirect aggression than participants' sex alone.

In order to test these hypotheses, independent samples *t*-tests were run using the Bonferroni correction procedure to determine whether there were sex differences on total indirect aggression and victimization scores (see Figure 2), on each indirect aggression and victimization item scores, and on instrumental and expressive social representations of indirect aggression. The assumptions of independence, normality, and homogeneity of variance were satisfied for all *t* tests conducted with the exception of expressive social representations, for which Levene's test was significant ($F = 4.898$, $p = 0.34$). In this case, the results of the *t* test are presented for equal variances not assumed. There were no sex differences on indirect aggression (t (40) = 0.334, $p = 0.833$), indirect victimization (t (40) -0.789, $p = 0.675$), expressive social representations of aggression (t (28.548) = -0.457, $p = 0.65$), instrumental representations of aggression (t (40) = -0.228, $p = 0.821$), or any of the 12 indirect aggression and indirect victimization items.

Figure 2. Mean values of indirect aggression and victimization by sex.



To further test the hypotheses, point biserial correlations between sex and indirect aggression and victimization, social representations of indirect aggression, and gender role orientation were performed. As shown in Table 5, contrary to what was predicted, there were no significant relationships. Given the lack of significant results in the independent samples *t* test and the point biserial correlations, sex was not controlled for in the multiple regressions presented below. Further, expressive social representations of indirect aggression, and masculinity and femininity were not entered into the regressions given the lack of significant relationships with indirect aggression and victimization as shown below in Table 5.

Table 5

Point Biserial Correlations of Sex by Indirect Aggression and Victimization, Social Representations of Indirect Aggression and Gender Role Orientation

Variable		Point Biserial Correlation Coefficient
Dependent Variable		
	Indirect Aggression	-0.05
	Indirect Victimization	0.12
Social Representations of Indirect Aggression		
	Expressive	0.08
	Instrumental	0.03
Gender Role Orientation		
	Femininity	-0.01
	Masculinity	-0.07

Note. ** $p < 0.001$, * $p < 0.05$

Stepwise multiple regressions. In order to further assess the role of sociocultural variables in indirect aggression and victimization, and in order to determine whether psychosocial adjustment variables (internalizing problems, inattention/hyperactivity, and personal adjustment) contributed significantly to the prediction of indirect aggression and victimization two stepwise multiple regressions were conducted. Stepwise regressions were conducted due to the exploratory nature of the research questions (Glass & Hopkins, 1996). Results of these analyses are presented in Table 6. For both regressions, only those variables which were found to be significantly related were included due to limitations associated with a small sample size.

Table 6

Summary of Stepwise Regression Analysis for Variables Predicting Indirect Aggression and Indirect Victimization

Criterion	Step	Predictors	*B*	*SE B*	□
Indirect Aggression					
	1	Indirect Victimization	.578	2.019	.503**
Indirect Victimization					
	1	Indirect Aggression	.439	.121	.503**
	2	Indirect Aggression	.398	.115	.456**
		Mania	.530	.218	.321*

Note. ** $p = 0.001$, * $p < 0.05$

When indirect aggression was entered as the criterion all assumptions were satisfied. The Durbin-Watson statistic (1.807) was within the expected range indicating that the residuals were normally distributed. Results of the Kolmogorov-Smirnov test (0.076, $df = 42$, $p = 0.200$) and the Shapiro-Wilk test (0.978, $df = 42$, $p = 0.570$) were non-significant. Therefore, the assumption of a linear relationship between observed scores and predicted scores was also satisfied. Finally, examination of the scatter plot between the standardized residuals and the standardized predicted values of indirect aggression indicated that the assumption of homoscedasticity was also satisfied. The following predictor variables were included in the analysis: instrumental social representations of indirect aggression, sensation seeking, and indirect victimization. However, indirect victimization was the only variable entered into the analysis. Results indicated that indirect victimization significantly accounted for 25.4% ($R^2 = 0.254$) of the variance in indirect aggression scores ($F(1, 39) = 13.244$, $p = 0.01$).

When indirect victimization was entered as the criterion, all assumptions were met. Specifically, the Durbin-Watson statistic (1.715) was within the expected range

indicating that the residuals were normally distributed. Results of the Kolmogorov-Smirnov test (0.076, $df = 42$, $p = 0.200$) and the Shapiro-Wilk test (0.978, $df = 42$, $p = 0.570$) were non-significant. Therefore, the assumption of a linear relationship between observed scores and predicted scores was also satisfied. Finally, the assumption of homoscedasticity was also satisfied. Due to the relationship between indirect victimization and indirect aggression, indirect aggression was controlled for and was entered in step one. Mania was entered in step two; however, instrumental social representations of indirect aggression, hyperactivity, and sensation seeking were removed. Results indicated that mania accounted for an additional 10% ($R^2_{\square} = 0.100$) of the variance in indirect victimization when controlling for indirect aggression ($F_{\square}$ (1, 38) = 5.910, $p = 0.020$).

Case by case analysis. Further examination at the individual level was utilized to provide further insight regarding the relationships between sociocultural variables, self-perceptions of psychosocial adjustment and behaviour, and indirect aggression and victimization. Information on sex, age, gender role orientation, social representation of indirect aggression, and at-risk (T score greater than or equal to 60) and clinically significant (T score greater than or equal to 70) psychosocial variables for those participants classified as pure indirect aggressors, pure indirect victims, or indirect aggressor/victims is presented in Table 7.

Table 7

Case by Case Analysis for Those Participants Classified as Indirect Aggressors, Victims, or Aggressor/Victims Based on z scores of one SD Above the Mean

Classification	Sex	Age	Gender Role Orientation	Social Representation of Indirect Aggression	Clinically Significant Variables	At-Risk Variables
Indirect Aggressor 1	Female	20	Feminine	Instrumental		Somatization

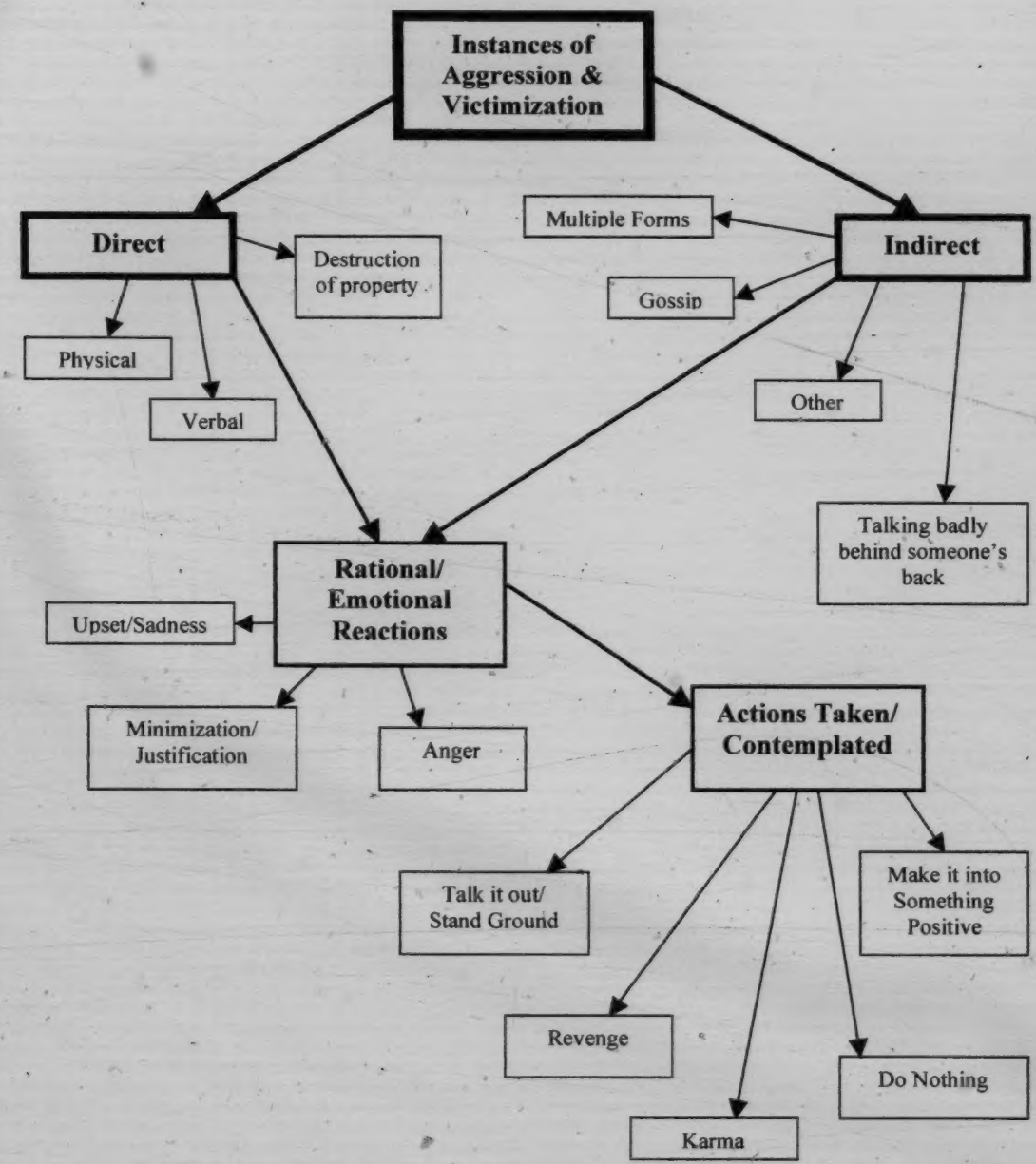
	2	Male	20	Masculine	Undifferentiated		Attention Problems, Hyperactivity, Interpersonal Relations
	3	Male	19	Undifferentiated	Undifferentiated		Attention Problems, School Maladjustment
Indirect Victim							
	1	Female	18	Feminine	Undifferentiated	Hyperactivity	Sense of Inadequacy, Alcohol Abuse, School Maladjustment, Mania
	2	Female	23	Undifferentiated	Undifferentiated		Anxiety
	3	Female	18	Feminine	Undifferentiated	Locus of Control, Self Esteem	Atypicality, Social Stress, Anxiety, Depression, Sense of Inadequacy, Somatization, Alcohol Abuse, Mania
	4	Female	18	Androgynous	Undifferentiated		Attention Problems
Indirect Aggressor/Victim							
	1	Male	18	Masculine	Instrumental	Sensation Seeking	Hyperactivity, Alcohol Abuse, Relations with Parents
	2	Female	19	Masculine	Instrumental	Mania	Anxiety, Attention Problems, Sense of Inadequacy, Hyperactivity

Inductive Thematic Analysis of Journal Content

In order to further explore the nature of indirect aggression and victimization in emerging adulthood, an inductive thematic analysis was conducted on 18 completed journals collected from a subset of participants. Braun and Clarke (2006) defined thematic analysis as "a method for identifying, analyzing, and reporting patterns (themes) within data" (p. 79), and argued for the necessity of the uniform application of thematic analysis in qualitative research. Inductive thematic analysis constitutes identifying themes that are related to the data themselves, and which may have little relationship to the actual questions asked of the participants. It involves coding the data without making it "fit" with an existing data coding scheme, or the researcher's a priori conceptions.

An essentialist/realist approach was employed in order to report the "experiences, meanings, and the reality of participants" (Braun & Clarke, 2006, p. 81) without attempting to go beyond the data in search of latent content and meanings. Further, a semantic approach was applied as this allowed for the analysis of the "explicit or surface meanings of the data" (p. 84), which compliments an essentialist/realist approach to analysis. This method was utilized in order to understand the experiences of emerging adults in a post-secondary educational setting without any presupposed biases, and with the intent to provide a clear and detailed picture of such experiences. It was the goal of this study to provide rich detailed data from participants in an exploratory attempt to discern what patterns/themes related to indirect aggression and victimization could be identified when participants were asked to simply discuss their social interactions of the day in general. A visual representation of the results is presented in figure 3.

Figure 3. Themes and sub-themes from thematic analysis of journal content.



As can be seen from figure 3, key themes and sub-themes were identified. With the intent of providing context for the key themes and sub-themes that were identified in

the analysis, the following are examples of instances of aggression and victimization, which were discussed in the journals by participants. Interestingly, participants mentioned not only those incidences in which they were they victim, but also incidences in which they were the aggressor. The following are examples of direct verbal and physical aggression, and property destruction:

Verbal

> Today, student dropped by my room. Student knew I was overweight and also knew that I was wanting to exercise as my new year's resolution. Instead of giving words of encouragement, student said "you'll never look like this bitch" and flexed his muscles… Well today, a student commented on my huge zit that is growing on my face. I was quite embarrassed because the student said it in front of a large crowd of people. I could see people smirking and not trying to be rude, but I knew they were laughing deep down inside… But yeah, another embarrassing moment today. (Male, 19)

> When I got back to my room, the guy from down the hall walked by and without any provocation began insulting my looks and intelligence (Male, 19).

Physical

> So this afternoon I was annoying my parents and my sister and my sister got fed up and slapped me twice; the second one was really hard and made me cry (Female, 19).

Property Destruction

> Later on, when I got home, I was studying with the same friends. Some of his other friends were in his room practicing throwing knives at his poster board. It was all fun and games until an errant knife pierced a bottle of his contact solution. An argument ensued, and I thought it was stupid. However, all of those guys started playing malicious pranks on each other as a sort of revenge (Male, 18).

There were also several examples of indirect aggression that were identified in the journals. These extracts, which are presented below include examples of gossip, talking badly about someone behind their back, other (i.e. exclusion, writing nasty messages), and an instance that demonstrated multiple forms of both indirect and direct victimization:

Gossip

> I talked with a few girls from my group project. I find they like to gossip and vent about instructors at the U. (Female, 23)

> At dinner it was me and 4 of my close buddies, and our conversation revolved around which profs we hated and funny things that had happened that day. (Male, 19)

Talking Badly behind Someone's Back

> Then this guy on the bus complained to the bus driver because he found the music on the bus "offensive" and that was pretty hilarious. Also the guy on the bus was HILARIOUS. Who complains about the music on the bus, it was practically elevator music. I know it's bad to gossip, but seriously that guy needs to shut his mouth and grow some balls. In conclusion, it was a funny situation… Also the smartass guy who basically told us he knew every answer to the exam and called me stupid was a dink. All my friends and I were pretty mad at him and his cocky demeanor but that's ok because he is a jerk and probably has no friends and his mom probably doesn't love him either. (Male, 18)

> Later when my roommate got back, the guy from across the hall came in same as yesterday and stood waiting to be acknowledged by one of us, and my roommate (who I've been friends with for many years) snapped at him and told him to leave. Once our door was closed, my roommate expressed his hatred for that man and I semi-agreed that he was kind of annoying. (Male, 19)

Exclusion

> The boys and I ended up playing poker for most of the day. It's sort of a guys' thing and when the girls ask to play we usually mention the fact that 'girls can't play poker'. (Male, 19)

Writing Nasty Messages

> When I got back someone had written a mean message on my board… I woke up and opened my door when a garbage can full of water fell into my room and soaked me. (Male, 20)

Multiple Forms

> One partially negative social interaction occurred tonight in the line up at Wendy's on campus. My friend and I ran into a girl that I am student teaching with. She was at Wendy's getting food with her boyfriend. Her and I said hi and how are you to each other and then strangely enough she also knew my friend. They awkwardly said hello. I asked them how they knew each other and they responded from elementary school. They had not seen each other since, until now. After the other student teacher left, my friend went on to tell me about how mean this girl had been to her in gr. 5-6. She had bullied and tormented her severely. For example, she had called her fat, told gossip about her, pushed her down (so she ended up having to go to the hospital for stitches), excluded her, tormented and laughed at her. The stories sounded pretty horrible. (Female, 20)

The first key theme that was identified focused on each individual's reaction to the incident of aggression or victimization. This theme, entitled "Rational/Emotional Reactions" demonstrated the tendency of the participants to rationalize the experience through explanation, justification, and understanding, as well as their tendency to express emotionally how the incident affected them. The following extracts exemplify attempts at making sense of what happened either from an emotional or a rational perspective, or both. Two of the sub-themes involved emotional reactions, including being upset or

saddened by the incident, and being angered by the situation, while the remaining sub-theme represented what may be considered a more rational reaction, such as minimizing or justifying the incident.

Upset/Sadness

> I felt bad because a banana got squished on one of my friend's new textbooks and as revenge he messed up some files on the other guy's computer. They were both my friends and I felt bad because they were asking me to take sides. Negative - entire situation with the throwing knives and my friends starting prank wars on each other. I felt bad because they were all my friends and I don't like to see them fight. They weakened their friendship with each other, and lots of stuff got wrecked. (Male, 18)

> Personally, I felt quite hurt at the student's remarks. I am very weight conscious so I took it really personally. It made me mad about people in society. So many people in society are jerks. I don't see how life keeps going as people just tolerate jerks like that student… Negative highlights of today was mainly the guy that lives at the end of the hall from me. He just really bothered me with his comments and antics. It really hurt my feelings. (Male, 19)

> My interactions with people on my floor are negative since the messages do nothing to help my self esteem. (Male, 20)

My friend said her school and teachers never did anything to help her.... My friend said that the experience changed who she was and who she now is at 23. She spent years wanting to commit suicide, crying and hating herself. (Female, 20)

Anger

Negative - being slapped by my sister, and then having her laugh and make light of the situation. It is slightly angering me now to even be writing about this. I was very upset with her. (Female, 19)

I get really tired of it! Everybody has weaknesses, and it's ok to get your frustrations out, but it gets tiring after a while. I strive to dwell on positive things because it certainly affects my mood. (Female, 23)

But the student is my friend, he just totally embarrassed me. Not too mad at him because we are pretty good buds so I won't hold him to that... I felt that today's negative was when my friend embarrassed me. Definitely felt really embarrassed. Got sweaty and all red so that didn't help my cause so that was definitely not good. At one point I was really mad that my friend said that, but I quickly got over it... All sorts of feelings ran by me after my friend made that comment. I went from embarrassed to angry to revengeful and then back to normal. (Male, 19)

> Well the first interaction with my classmate was a negative one for me because it just felt like she was trying to make me look pathetic in front of the class because I had an opinion about a TV show. I was pissed at her but she's the one that made it into a big deal so I got over it. She's been that way the whole term and everyone knows it. (Female, 20)

Minimization/Justification

> This is all in good jokes though of course… The thing is about these jokes is that we are not directly laughing at the person but with them as well. (Male, 19)

> Even though some of the things they said were mean it was quite clear that they meant no harm, as it eventually turned into jokes that we all laughed at. (Male, 19)

> I'm sure it bothered her but will most likely be "brushed off". (Female, 20)

> Since I live in dorms I can just take it as a joke… I think this was my floor's way of telling me to stop being so sensitive so I just laughed about it. I don't think they did it because they hate me they just did it to get a reaction out of me. (Male, 20)

The third key theme identified was related mainly to those experiences in which the individual was the victim as opposed to the aggressor. The participants' wrote about what action they took after the incident, as well as some discussed actions they had contemplated, but not necessarily followed through on. Five sub-themes were detected, which included talking to the aggressor or taking a stand against the aggressor,

contemplating revenge against the aggressor, leaving things to karma, doing nothing at all, and turning the negative experience into something positive by helping educate others on the topic. Examples of these sub-themes are presented below:

Talk it out/Stand their Ground

> I usually tell my roommate that he doesn't have to be mean, but he does hate everybody who isn't already his close friend. (Male, 19)

> I talked to some of the people on my floor and told them that I did not like their messages. They told me I was being sensitive and to grow up. This made me feel sad inside. (Male, 20)

> He told her: "stand your ground, continue to sit in the same seat in the library as usual." As if he perceived it as some kind of war. (Female, 20)

Revenge

> I thought about all the horrible things I'd like to do to her (although obviously I wouldn't) – like when she gets her grad dress to take scissors to it and rip it up – something that she'd be very upset about. It just felt bad. She didn't really seem to care after she hurt me. (Female, 19)

> I am considering taking steroids and 'beefing' up, one day going back and showing student how strong I have become… I'm sure I'll humiliate him another day… I felt a sort of revenge that I needed to get back at my friend. (Male, 19)

Karma

I'll just let karma take care of itself. (Male, 19)

I saw the incident as a karmic event – coming back to my fellow student teacher to remind her of what she had done at this stage in her life when she is becoming a teacher! (Female, 20)

Do Nothing

It was a no win situation so I left. (Male, 18)

I just can't stand the student at times… I am use to being taunted anyways so I try to shrug it off. Build up a 'thick skin' right? I don't want to confront my problems it'll just make things worse. (Male, 19)

I figure if I just ignore it then they won't continue to prank me… Today I reacted positively to a negative situation. I think this was a better way of handling it that in I would have complained to my F.C. because if I complained people would really discriminate against me. I guess I will find out later if this was a good decision depending on if this type of behaviour continues. (Male, 20)

Make it into Something Positive

I asked her if she would come into my classroom and speak to my students about her experiences when I eventually have my own classroom. (Especially because she is successful and attractive now and you would NEVER guess this about her past). She said she would. (Female, 20)

CHAPTER V

Discussion

Interpretation of Results and Implications

Frequency of indirect aggression and victimization. The preliminary objective of this study was to determine the frequency of indirect aggressors, victims, and aggressor/victims in an emerging adult population, as well as to provide further descriptive information for this sample given the severe lack of previous research with participants of this developmental period. Results indicated that 7.14% of the sample could be classified as pure indirect aggressors (33% of those involved in indirect aggression), 9.52% could be classified as pure indirect victims (44% of those involved), and 4.76% could be classified as indirect aggressor/victims (22% of those involved). These results are similar to previous studies, which have investigated indirect aggression and victimization in adolescent populations (e.g., Leenaars, Dane, Marini, & YLC-CURA, 2007; Marini, et al., 2006).

When compared to studies of indirect aggression and victimization in adulthood, the percentage of individuals in this study who were classifiable was substantially lower (e.g., Ireland & Archer, 2002; Ireland & Power, 2004). One further study conducted by Ireland, Archer, and Power (2007) on male and female prisoners found that 39% reported indirect victimization and 34% indirect bullying. However, it must be noted that in these previous studies, the samples consisted of incarcerated adults and young offenders who may differ from the general population of emerging adults, as well as in several cases percentages presented included both direct and indirect aggression. The few remaining

studies which have investigated indirect aggression and victimization in adulthood did not report frequencies nor percentages of the separated classifications.

Given this lack of previous reporting in studies of indirect aggression and victimization in work place settings and college settings, and given the nature of the populations for which this was reported, it is difficult at this time to say whether the frequency of indirect aggression and victimization is typical of an emerging adult population. On the other hand, the similarity of the present results to statistics reported for adolescent populations may be explained by Arnett's (2007) argument that the developmental period which spans the ages of 18 to 25 is a transitional period between adolescence and adulthood, or a period of extended adolescence, which is associated with characteristics more typical of adolescents than adults.

Relationships between indirect aggression and victimization, sociocultural variables and psychosocial adjustment. As predicted, instrumental social representations of indirect aggression was positively related to indirect aggression, which is consistent with results presented by Tapper and Boulton (2000). However, contrary to their findings and to the prediction that expressive social representations of aggression would be negatively related to indirect aggression, expressive representations were found to be unrelated to indirect aggression in the present study. In other words, holding a more expressive representation, which is associated with viewing aggression as related to a loss of self-control that may lead to the breakdown of normal social interactions was unrelated to involvement in indirect aggression. This may be attributable to the violation of the assumption of homogeneity of variance for this variable.

The results do suggest that individuals who hold a more instrumental social representation of indirect aggression, that is individuals who view aggression as being related to control over others, and as a way of achieving a goal, were more likely to engage in indirect aggression. Despite this, instrumental social representation of indirect aggression was not a significant predictor of indirect aggression. When this was investigated at the individual level, it was found that one of the three indirect aggressors held an instrumental representation, while the other two were undifferentiated. Moreover, both of the indirect aggressor/victims held instrumental representations.

Consistent with previous research, several measures of psychosocial adjustment were significantly related to indirect aggression and victimization. Specifically, sensation seeking was found to be positively related to indirect aggression ($r = 0.39$). Hyperactivity ($r = 0.31$), sensation seeking ($r = 0.35$), and mania ($r = 0.39$) were found to be positively related to indirect victimization. This suggests that as in childhood and adolescence, indirect aggression and victimization is related to psychosocial maladjustment in emerging adulthood, and thus reiterates the need to further investigate indirect aggression and victimization in this population.

Sex differences. Consistent with some previous literature regarding indirect aggression and victimization, and as predicted, there were no significant sex differences for either indirect aggression or victimization, nor were there any in the specific form (e.g. exclusion, rumour spreading) of indirect aggression or victimization. When further exploration was conducted at the individual level, it was found that of those individuals classified as pure indirect aggressors two were male and one female, all pure indirect victims were female, and of the two indirect aggressor/victims, one was male and one

Contrary to what was predicted and to previous findings (e.g. Archer & Parker, 1994; Tapper & Boulton, 2000), there were no sex differences in social representations of indirect aggression. This may be related to the differences in sample characteristics between the present study and those previous studies in which social representations of indirect aggression were investigated in children. Perhaps, similar to the trend in participation in indirect aggression, sex differences in social representations of indirect aggression decrease with age.

Prediction of indirect aggression and victimization. It was hypothesized that sociocultural variables (gender role orientation and social representations of indirect aggression) would be more predictive of indirect aggression than biological sex alone. Results of the stepwise multiple regression did not support this prediction, despite the significant correlation between instrumental social representations of indirect aggression. Further, gender role orientation was not entered into this analysis as neither masculinity nor femininity was found to be significantly related to indirect aggression. Parallel results were found at the individual level for indirect aggressors (one masculine, one feminine, one undifferentiated) and indirect aggressor/victims (both masculine). This may be related to the disproportionate number of individuals classified as undifferentiated, and may lend reason for further concern over the use of the BSRI as a measure of masculinity and femininity already raised in previous literature (see Hoffman & Borders, 2001 for a review).

Results of the regression indicated that indirect aggression was best predicted by indirect victimization, which accounted for 25% of the variance. This is in line with recent research which suggests that indirect bully/victims account for a significant

female. Interestingly, it seems that when individuals were classified and when reports of incidences provided in the journals were examined, indirect aggressors and indirect aggressor/victims followed the overall trend of being similarly represented by both males and females, which is consistent with both a sociocultural and an evolutionary perspective of indirect aggression. As age increases, the knowledge and incorporation of social and cultural variables into schemas increases, and as social intelligence increases, individuals regardless of sex, learn to use indirect aggression as a means of manipulating the social hierarchy in order to obtain mates and establish him- or herself within that given hierarchy (Bjorklund & Pellegrini, 2000; Campbell, 1999, 2004).

The presence of only female victims when classified is interesting given that there was no significant sex difference in indirect victimization for the total sample. It may be that males who are more likely to report victimization are also more likely to report being indirectly aggressive as well. It is also possible that females report indirect victimization more frequently than do males, to a degree considered clinically significant, but not statistically significant. Given this, it is surprising that qualitative data revealed similar representation of males and females reporting instances of indirect victimization. This may suggest that when males are aware that they are being asked questions of indirect victimization (i.e. through questionnaires) they are less willing than females to report such experiences, but that when unaware of the nature of the questions (i.e. through journals) they are more willing to report such incidents. This may be related to the general conception, both in research and in society in general, of indirect aggression as "female" aggression, thus leading males to be less willing to identify themselves as victims of this type of aggression.

percentage (approximately 33%) of individuals involved in indirect aggression in both adolescence and adulthood (see Marini, et al., 2006; Ireland & Archer, 2002; Ireland & Power, 2004). In addition, the psychosocial adjustment measure of sensation seeking that was found to be significantly related to indirect aggression did not account for a significant amount of the variance above and beyond indirect victimization. More coherent with previous research were results at the individual level, which demonstrated that all three classifiable indirect aggressors reported at-risk, but not clinically significant ratings on several of the psychosocial adjustment scales. Specifically, at-risk ratings were reported for the internalizing problems composite scale (Somatization, School Maladjustment), inattention/hyperactivity composite scale (Attention Problems, Hyperactivity), and the personal adjustment scale (Interpersonal Relations). This suggests that emerging adults who engage in indirect aggression experience psychosocial maladjustment similar to children and adolescents.

In relation to indirect victimization, the goal of the present study was to explore which psychosocial factors were related, as this has been done less frequently in the existing literature, and has not been done with emerging adults. Results indicated that when controlling for indirect aggression, mania significantly predicted an additional 10% of the variance in indirect victimization. A manic episode is defined by:

> A distinct period during which there is an abnormally and persistently elevated, expansive, or irritable mood and includes symptoms of inflated self-esteem or grandiosity, decreased need for sleep, pressure of speech, flight of ideas, distractibility, increased involvement in goal-directed activities or psychomotor

> agitation, and excessive involvement in pleasurable activities with high potential for painful consequences. (American Psychiatric Association, 2000, p.357).

This implies that individuals who display these characteristics and behaviours may be more likely to be the victims of indirect aggression, as they are seen as weaker and less likely to retaliate. They may display less well developed social intelligence due to their often erratic, unpredictable, and seemingly juvenile behaviour, their inflated self-esteem and grandiosity may also irritate those individuals who are likely to indirectly aggress, thus putting them at further risk of being victimized. Interestingly, mania was not one of the major psychosocial maladjustment factors associated with indirect victimization reported in previous studies. Perhaps this is a factor uniquely related to indirect victimization in emerging adulthood. Further research into the link between mania and indirect victimization is needed.

At the individual level, several clinically significant and at-risk ratings were reported by indirect victims. Clinically significant ratings included internalizing problems (locus of control, self esteem), and hyperactivity. At-risk factors included internalizing problems (sense of inadequacy, alcohol abuse, school maladjustment, mania, anxiety, atypicality, social stress, depression, and Somatization), and attention problems. This is consistent with previous research conducted with child and adolescent victims.

While regression analyses were not run for indirect aggressor/victims due to limitations related to sample size, psychosocial adjustment at the individual level was assessed given that this group represented 22% of those individuals involved in indirect aggression. Comparable to previous research, indirect aggressor/victims also exhibited psychosocial maladjustment. Clinically significant ratings were reported for sensation

seeking and mania. Further, at-risk ratings were reported for the internalizing problems composite (alcohol abuse, anxiety, sense of inadequacy), inattention/hyperactivity composite (hyperactivity and attention problems), and the personal adjustment composite (relations with parents). By examining the three groups at an individual level we can see a trend towards aggressor/victims being more similar to pure victims than aggressors in terms of psychosocial adjustment, thus highlighting the importance of further research concerning this unique group of individuals.

Qualitative data. The final goal of this study was to explore indirect aggression and victimization using a qualitative method of data collection. Such an approach was employed in order to move beyond the limitations encountered by previous studies, which have not considered the possibility of eliciting rich data from participants. Not only do the results of the thematic analysis provide further support for the occurrence of indirect aggression and victimization in emerging adulthood, the results allow for the individuals involved to describe their experiences from their perspective without the rigidity often associated with questionnaires. Finally, this data may inform future research on indirect aggression. From this data, we see that not only do emerging adults in a postsecondary setting experience similar forms of indirect aggression as adolescents, they also experience similar forms of direct aggression. While direct aggression was not the focus of this study, it was interesting to discover the number of instances of direct aggression occurring in emerging adulthood in a sample of university students. If we adhere to Bjorkqvist et al. (1991) and Kaukiainen et al.'s (1999) theory of the development of aggression, which states that aggression progresses from physical to verbal to indirect with the progression of age and the development of social intelligence,

it is curious that instances of physical and verbal aggression were so often reported in a sample of emerging adults. Perhaps this is in line with the argument put forth by Arnett (2007) that emerging adulthood is a period of extended adolescence, and as such, is subject to similar patterns of behaviour as are typically seen in adolescence.

Two main themes were identified in the thematic analysis of the journal data, which may together exemplify the individuals' attempts to cope with experiences of indirect aggression or victimization. To date, no research has been conducted with a sample consisting of emerging adults to determine the ways in which these individuals deal with their experiences. The present study provides not only a detailed description of this, but may also act as a catalyst for future research in this area.

The first main theme involved both rational and emotional reactions to an incident of indirect aggression or victimization, which included sadness, anger, and minimization or justification. What we gain from this, is a glimpse of what it feels like to be an indirect aggressor or victim. We can feel some of their sadness, their anger, their self doubt, their hatred, their pain, and their struggle to understand what happened, and we are reminded that while large quantitative studies can provide us with numbers, this type of information can allow us to get a glimpse into their experiences. It follows that if we better understand how people naturally react and respond to these situations we may be better able to take a few steps closer to designing and implementing effective prevention and intervention programs.

The second main theme identified included the individuals' actions (whether contemplated or actually carried out) taken after the incident. In this case there were five sub-themes, which included doing nothing, seeking revenge, leaving things to karma,

talking it out, and turning the experience into a positive. The wide range of actions taken could inform us on what works and what does not work in terms of programs, and stresses the need to think outside the box in this regard. Specifically, we see from these journals that in these particular cases confronting the aggressor did not work, ignoring the aggressor did not work, and letting karma take care of the aggressor did not work. The sub-theme of seeking revenge is interesting as it enlightens us as to why a significant number of individuals involved in indirect aggression can be considered aggressor/victims. It also shows us how the cycle of aggression is continued. The final sub-theme was perhaps a bit more encouraging as it involved an attempt to make the experience into something positive for others by talking to students about the experience and its effects. This action emphasizes the potential benefits of support groups, and may be something to also incorporate into larger scale programs. The journal data highlight the realization that bullying, both direct and indirect, is not unique to children and adolescents, but seems to be a common human experience. Overall, we see that there is a need to educate people of all age groups on how to deal with such situations as it is evident that we can not assume that people naturally know what to do.

Finally, an examination of the journals brought forth a further, perhaps disturbing trend in the way in which indirect aggression (and aggression in general) was viewed. For example, consistently across and within the journals "gossiping" was discussed as though it were a benign, harmless, entertaining way to pass the time. It appears from the data extracts previously provided that gossiping is thought of as normal or natural, and that there is nothing wrong with it. To quote one of the participants who discussed gossiping in their journal: "it's always going to happen, no matter what, it's just like natural that

people do that". This raises the question of when gossiping becomes aggression, and how do we as researchers and society in general discern the difference between gossiping without malicious intent or consequence and gossiping as aggression?

Limitations

There are a few limitations that should be considered in interpreting the present results. The major limitation of this study is the relatively small sample size, which affects the degree to which the present results may be generalized to the larger population. The data are based on self-report measures, however, this methodology has been used extensively in this area of research, it appears to yield reliable, valid and informative results that are comparable to peer reports (see Crick & Bigbee, 1998). Controversy over the usefulness and appropriateness of the BSRI as a measure of masculinity and femininity also lends caution to interpretation of the results. It remains a possibility that gender role orientation may be related to indirect aggression as the limitations of the BSRI, which were previously discussed, may have contributed to the lack of such findings in the present study. However, it should be noted that at present there does not exist an alternative measure of masculinity and femininity as widely used and researched as the BSRI. Further, it is also possible that gender role orientation is not a major factor in understanding indirect aggression and victimization in emerging adulthood, as was found with biological sex. The DIAS was originally constructed for use with children and adolescents, and as such, its use may not have been able to fully capture the nature of indirect aggression and victimization in emerging adulthood. While several adult measures of indirect aggression and victimization do exist, one was designed for use with prison populations (Direct and Indirect Prisoner Behaviour

Checklist; Ireland, 1998) and one was only recently developed and has not been readily submitted to studies of validity and reliability (Indirect Aggression Scales; Forrest, et al., 2005). In addition, caution must be exercised in making conclusions regarding direction of causation because the data are correlational in nature, and as such may be suspect to issues concerning directionality, and third variable effects.

Future Research

This study demonstrates the necessity of investigating indirect aggression and victimization beyond high school, and in alternative settings to the workplace and prison. Continued research on this is essential so that we may more fully comprehend indirect aggression in emerging adulthood, and its similarities and differences to indirect aggression in childhood and adolescence. Further, future research should aim to expand on the results of the current thematic analysis, which highlighted the importance of attempting to cope with experiences of indirect aggression, especially for the victims. Finally, the relationship between indirect aggression and victimization and psychosocial maladjustment, which has been reported in previous studies in children and adolescents, and has here been shown in emerging adulthood, further stresses the need to design and implement more effective prevention and intervention programs including campus services for not only those individuals involved, but for everyone.

Conclusion

As predicted, no sex differences in indirect aggression or victimization were found; however, contrary to predictions there were also no sex differences in gender role orientation or social representations of indirect aggression. While instrumental social representations of indirect aggression were found to be positively related to indirect

aggression, this factor was not found to be a significant predictor. Interestingly, indirect victimization was found to be the sole significant predictor of indirect aggression, accounting for 25% of the variance. While no indicators of psychosocial adjustment were found to be significant predictors of indirect aggression, results indicated that a positive relationship with sensation seeking existed. Indirect victimization was found to be positively related to sensation seeking, hyperactivity, and mania, nevertheless only mania was found to be a significant predictor, and accounted for an additional 10% of the variance when controlling for indirect aggression. When psychosocial adjustment was investigated at the individual level for indirect aggressors, victims, and aggressor/victims, several clinically significant and at-risk ratings were reported.

In conclusion, the findings of the present study reinforce the need to broaden our investigations of indirect aggression and victimization: to move beyond an investigation of simple sex differences, to look at its occurrence in emerging adulthood and beyond, in settings other than prison and the workplace, and to focus on more complex explanations of indirect aggression and victimization in general. Finally, the present study demonstrated the value of supplementing quantitative investigations of indirect aggression and victimization with rich and detailed accounts of the participants' experiences in their everyday social interactions through journal keeping. Taken together, the present study provides further information that can help in the development and implementation of effective prevention and intervention programs, and inform evidence-based practice with individuals in counselling, and psychotherapy settings, as well as university campus counselling services and support groups.

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Appendix A

Demographic Questions

1. Please indicate your sex by circling one of the following:
   a. Male
   b. Female
   c. Other, Please specify ____
2. With which ethnic background do you most closely identify yourself? _____
3. What is your date of birth (YYYY/MM/DD)? _____
4. When did you graduate from high school (YYYY/MM/DD)? _____

Appendix B1

The Indirect Aggression Subscale Self-Report of the DIAS – Aggressor Version

Using the following scale, please indicate how often you engage in each of the behaviours below.

0 = Never
1 = Seldom
2 = Sometimes
3 = Quite Often
4 = Very Often

How often in the past year have you:

1. Shut someone out of the group?

0 1 2 3 4

2. Become friends with someone as a kind of revenge?

0 1 2 3 4

3. Ignored someone?

0 1 2 3 4

4. Gossiped about someone with whom you are angry?

0 1 2 3 4

5. Told bad or false stories about someone?

0 1 2 3 4

6. Planned secretly to bother someone?

0 1 2 3 4

7. Said bad things behind someone's back?

0 1 2 3 4

8. Said to others "Let's not be with him/her"?

0 1 2 3 4

How often in the past year have you:

9. Told someone's secrets without their permission to a third person?

0 1 2 3 4

10. Written nasty notes in which someone is criticized?

0 1 2 3 4

11. Criticized someone's hair or clothing to others?

0 1 2 3 4

12. Tried to get others to dislike someone you are angry with?

0 1 2 3 4

Appendix B2

The Indirect Aggression Subscale Self-Report of the DIAS – Victim Version

Using the following scale, please indicate how often the following situations have happened to you:

0 = Never
1 = Seldom
2 = Sometimes
3 = Quite Often
4 = Very Often

How often in the past year have you had someone:

1. Shut you out of the group?

0 1 2 3 4

2. Become friends with someone else as a kind of revenge?

0 1 2 3 4

3. Ignore you?

0 1 2 3 4

4. Gossip about you when they are angry with you?

0 1 2 3 4

5. Tell bad or false stories about you?

0 1 2 3 4

6. Plan secretly to bother you?

0 1 2 3 4

7. Say bad things behind your back?

0 1 2 3 4

8. Say to others "Let's not be with him/her"?

0 1 2 3 4

How often in the past year have you had someone:

9. Tell your secrets to a third person without your permission?

0 1 2 3 4

10. Write nasty notes in which you are criticized?

0 1 2 3 4

11. Criticize your hair or clothing?

0 1 2 3 4

12. Try to get others to dislike you when they are angry with you?

0 1 2 3 4

Appendix C

Indirect Aggression Short EXPAGG Questionnaire

Please indicate your agreement with the statements listed below using the following scale:

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree (Neutral)
4 = Agree
5 = Strongly Agree

Please circle the appropriate number that corresponds to your level of agreement.

1. When I tell an untruth behind someone's back it comes from losing my self-control.

1 2 3 4 5

2. When gossiping about someone, I am most afraid of saying something terrible that I can never take back.

1 2 3 4 5

3. When I get to the point of telling untruths about someone to get at them, I am most aware of how upset and shaky I feel.

1 2 3 4 5

4. When I have a falling out with someone I feel out of control.

1 2 3 4 5

5. After spreading a rumour about someone I feel drained and guilty.

1 2 3 4 5

6. When I have a falling out with someone, I would feel more annoyed with myself if I cried.

1 2 3 4 5

7. If someone said something nasty about me behind my back I would feel cowardly if I did nothing about it.

1 2 3 4 5

8. The best thing about getting even with someone is it makes the other person do what I want them to do.

1 2 3 4 5

9. If I say something nasty behind someone's back and hurt them I feel as if they were asking for it.

1 2 3 4 5

10. I believe that ignoring someone who has annoyed you is necessary to get through to some people.

1 2 3 4 5

Appendix D

General Information Regarding the Journal Entries

We are interested in learning about the daily lives of first year university students. We are especially interested in learning about the daily social interactions of first year university students (your interactions), such as interactions with peers, professors or instructor, employers, co-workers, and parents. Such interactions may take place at different times, in many different locations, and in many different forms (for example, face-to-face, over the phone, through text messaging, or online).

We will be asking you to write about your daily social interactions, and to be specific about the positive and negative aspects of these interactions. We will ask you to provide some *positive highlights* (e.g., "I had a funny conversation today with my friend/professor/parent, and we laughed about it for a long time" or "I heard a rumour today about a man/woman in one of my classes, and instead of spreading it around, I told the person that it wasn't true"). We will also ask for some *negative highlights* (e.g., "I got into a fight with my brother today because he really pissed me off" or "Somebody wrote something about me on the bathroom wall").

At the end of each day for the next three days we would like you to complete a journal entry. Days 1 and 2 will have two sections that we would like you to complete. Day 3 will have three sections.

Please remember that these journals are completely anonymous, and will remain completely confidential, in the hope that you will feel free to talk openly and honestly about your experiences. In order to maintain the anonymity of those with whom you have interacted, we ask that you refrain from using anyone's real names in your journal, and ask instead that you use pseudonyms or titles (e.g., mom, dad, best friend, boy- or girlfriend, biology professor, student, etc.)

DAY 1

1. Please reflect on and write about your social interactions (for example with friends, classmates, professors, parents, etc.) today, in as much detail as possible. Include details such as the people involved, the location, the circumstances of the interactions, and especially your thoughts/feelings about these experiences.

2. Please reflect on and write about the positive and negative highlights of your social interactions today, in as much detail as possible. Explain why you felt that these interactions were positive or negative. Include details such as how it affected you, how it affected those around you, how it might have gone differently, etc.

DAY 2

1. Please reflect on and write about your social interactions (for example with friends, classmates, professors, parents, etc.) today, in as much detail as possible. Include details such as the people involved, the location, the circumstances of the interactions, and especially your thoughts/feelings about these experiences.

2. Please reflect on and write about the positive and negative highlights of your social interactions today, in as much detail as possible. Explain why you felt that these interactions were positive or negative. Include details such as how it affected you, how it affected those around you, how it might have gone differently, etc.

DAY 3

1. Please reflect on and write about your social interactions (for example with friends, classmates, professors, parents, etc.) today, in as much detail as possible. Include details such as the people involved, the location, the circumstances of the interactions, and especially your thoughts/feelings about these experiences.

2. Please reflect on and write about the positive and negative highlights of your social interactions today, in as much detail as possible. Explain why you felt that these interactions were positive or negative. Include details such as how it affected you, how it affected those around you, how it might have gone differently, etc.

DAY 3 CONTINUED

We are very interested in learning your thoughts and suggestions regarding prevention and intervention programs designed to deal with indirect aggression/bullying. Indirect aggression includes behaviours such as spreading rumours, sending nasty anonymous notes or text messages to others, ignoring others, and excluding others from a group.

Many of the programs designed to stop bullying or to help victims cope with being bullied have been designed by adults. We are interested in designing programs based on the suggestions of individuals who may experience this type of bullying and who we think may therefore have effective or innovative ideas about how to stop this behaviour.

3. What are your suggestions for designing programs to stop indirect aggression/bullying, or to help the victims of such behaviour? Please list as many ideas/suggestions as you can.

Appendix E1

RESEARCH PARTICIPANT INFORMATION SHEET

Principle Researcher: Lindsey Leenaars leenaars@ualberta.ca 893-2389
Supervisor: Dr. Christina Rinaldi crinaldi@ualberta.ca 492-7471

We invite you to participate in our current research project that is focused on the daily social life experiences of male and female university students (ages 18 - 25). The purpose of this study is to try to understand the daily experiences of first year university students' social interactions, attitudes and behaviours.

The study consists of a questionnaire package containing 6 questionnaires as well as a journal package containing three journal entries. You will be asked to carefully read the instructions on each page and complete the questionnaires and journal entries. You will be given one week to complete both packages at your convenience. Completing the questionnaire package should take no longer than 1 to $1^{1/2}$ hours, and the journal package should take approximately 15 to 20 minutes for each of the three entries with a total of 45 minutes to 1 hour. The results of this study will be locked in a secure area and no identifying names will be collected. The consent form with the name of the participant's parent or legal guardian and the assent form with the participant's name will be kept separate from the anonymous questionnaires and locked in a secure area.

It is important to understand that participation in this project is voluntary. This means that you may choose to participate or withdraw at any time throughout the study without penalty. The researchers involved with this study comply with the University of Alberta Standards for the Protection of Human Research Participants. There is possibility of minimum risk involved in this study as talking about your daily social interactions, behaviours and attitudes may lead you to feel distress. If this is the case, counseling will be made available to you upon request. The data from this study may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes.

If you have any questions or concerns regarding this project or if you would like a copy of this report upon its completion, please feel free to contact the principle researcher, Lindsey Leenaars (Leenaars@ualberta.ca,), the principle researcher's supervisor, Dr. Christina Rinaldi (crinaldi@ualberta.ca), or the Chair of the Department of Educational Psychology, Dr. Robin Everall at (780) 492-2389.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB c/o Betty jo Werthmann at (780) 492-2261.

Appendix E2

RESEARCH PARTICIPANT INFORMATION SHEET

Principle Researcher: Lindsey Leenaars leenaars@ualberta.ca 893-2389
Supervisor: Dr. Christina Rinaldi crinaldi@ualberta.ca 492-7471

We invite you to participate in our current research project that is focused on the daily social life experiences of male and female university students (ages 18 - 25). The purpose of this study is to try to understand the daily experiences of first year university students' social interactions, attitudes and behaviours.

The study consists of a questionnaire package containing 6 questionnaires. You will be asked to carefully read the instructions on each page and complete the questionnaires. You will be given one hour to complete the package at which time you will be given a debriefing sheet, and asked to sign in to ensure that you receive your research credit. The results of this study will be locked in a secure area and no identifying names will be collected. The consent form will be kept separate from the anonymous questionnaires and locked in a secure area.

It is important to understand that participation in this project is voluntary. This means that you may choose to participate or withdraw at any time throughout the study without penalty. The researchers involved with this study comply with the University of Alberta Standards for the Protection of Human Research Participants. There is possibility of minimum risk involved in this study as talking about your daily social interactions, behaviours and attitudes may lead you to feel distress. If this is the case, counseling will be made available to you upon request. The data from this study may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes.

If you have any questions or concerns regarding this project or if you would like a copy of this report upon its completion, please feel free to contact the principle researcher, Lindsey Leenaars (Leenaars@ualberta.ca), the principle researcher's supervisor, Dr. Christina Rinaldi (crinaldi@ualberta.ca), or the Chair of the Department of Educational Psychology, Dr. Robin Everall at (780) 492-2389.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB), and the Faculties of Art, Science, and Law Research Ethics Board (ASL REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB c/o Betty jo Werthmann at (780) 492-2261.

Appendix F1

CONSENT FORM

Principle Researcher: Lindsey Leenaars leenaars@ualberta.ca 893-2389
Supervisor: Dr. Christina Rinaldi crinaldi@ualberta.ca 492-7471

Objectives: We are interested in first year university students' daily social interactions and self-perceptions of attitudes and behaviours.

Purpose: In this study, you will be asked to fill out a questionnaire package containing six self-report questionnaires including demographic questions, questions on aggression/bullying and victimization, perceptions of aggression, and general behaviour and attitudes. You will also be asked to complete three daily journal entries regarding their daily social interactions. On the last journal you will also be asked to share with us your thoughts and suggestions regarding prevention and intervention programs designed to deal with aggression/bullying. You will be given one week to complete the questionnaire/journal package. We anticipate that it will take you between 1 hour and 1 ½ hours to complete the questionnaire portion, and approximately 45 minutes to 1 hour to complete the three journal entries. You are free not to participate and to withdraw at any time without penalty. Although your name will appear on this consent form, it will be kept confidential and separate from your questionnaire/journal package in order to ensure anonymity. Both consent forms and questionnaires will be locked in a secure area. Analyzed data will be stored in a secure location for a minimum of five years after the completion of the study. The data fro +m this study will be used towards the completion of the principle researcher's Master's degree, and may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes.

Informed Consent of Participant

If you have any questions or concerns about this study or wish to receive a summary of the results upon its completion, you can contact the principle researcher, Lindsey Leenaars (leenaars@ualberta.ca), the principle researcher's supervisor, Dr. Christina Rinaldi (crinaldi@ualberta.ca), the Chair of the Department, Dr. Robin Everall at (780) 492-2389, or the Chair of the EEA REB at (780) 492-3751.

I, _____, understand what will be asked of me in this study and that I have the right not to participate if I do not wish to. I understand that my identity will be kept completely confidential and that my name will not be used anywhere except on this form which will be kept separate from my answers on the questionnaire/journal package to ensure anonymity. I understand that my answers will only be reviewed by the researcher in this study and that I am free to withdraw from the study at any time without penalty. I understand that this data may be used for presentation and in research publications. Finally, I understand that if I experience any kind of distress from this study and would like to seek counseling; this option will be made available to me.

_____ _____
(signature of participant) (date)

_____
(signature of researcher)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties or Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

Appendix F2

CONSENT FORM

Principle Researcher: Lindsey Leenaars leenaars@ualberta.ca 893-2389
Supervisor: Dr. Christina Rinaldi crinaldi@ualberta.ca 492-7471

Objectives: We are interested in first year university students' daily social interactions and self-perceptions of attitudes and behaviours.

Purpose: In this study, you will be asked to fill out a questionnaire package containing six self-report questionnaires including demographic questions, questions on aggression/bullying and victimization, perceptions of aggression, and general behaviour and attitudes. You will be given one hour to complete the study package. You are free not to participate and to withdraw at any time without penalty. Although your name will appear on this consent form, it will be kept confidential and separate from your questionnaire/journal package in order to ensure anonymity. Both consent forms and questionnaires will be locked in a secure area. Analyzed data will be stored in a secure location for a minimum of five years after the completion of the study. The data from this study will be used towards the completion of the principle researcher's Master's degree, and may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes.

Informed Consent of Participant

If you have any questions or concerns about this study or wish to receive a summary of the results upon its completion, you can contact the principle researcher, Lindsey Leenaars (leenaars@ualberta.ca), the principle researcher's supervisor, Dr. Christina Rinaldi (crinaldi@ualberta.ca), the Chair of the Department, Dr. Robin Everall at (780) 492-2389, or the Chair of the EEA REB at (780) 492-3751.

I, _____, understand what will be asked of me in this study and that I have the right not to participate if I do not wish to. I understand that my identity will be kept completely confidential and that my name will not be used anywhere except on this form which will be kept separate from my answers on the questionnaire package to ensure anonymity. I understand that my answers will only be reviewed by the researcher in this study and that I am free to withdraw from the study at any time without penalty. I understand that this data may be used for presentation and in research publications. Finally, I understand that if I experience any kind of distress from this study and would like to seek counseling; this option will be made available to me.

_____ _____
(signature of participant) (date)

_____
(signature of researcher)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB), and the Faculties of Art, Science, and Law Research Ethics Board (REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

Appendix G1

Questionnaire/Journal Package Instructions

In the following package you will find six questionnaires and a journal package that will ask you to answer some questions regarding your social interactions, and questions regarding the things that some first year university students may do or the way they may feel. All of the questionnaires and the journal package have instructions printed on them. If, at any time any of the instructions are unclear, or you do not understand what is being asked of you, please feel free to contact the researcher. Please remember that all information that you provide is completely anonymous and confidential. Please be honest when answering the questions as the information that you provide for us is extremely valuable and may help us to answer some very important questions. Please keep in mind that you do not have to answer any question that you do not feel comfortable answering, but also remember that these questionnaires are anonymous and confidential and that your name will not be tied to any of the information that you provide.

Appendix G2

QUESTIONNAIRE INSTRUCTIONS

In the following package you will find six questionnaires that will ask you to answer some questions regarding your social interactions, and questions regarding the things that some individuals may do or the way they may feel. All of the questionnaires have instructions printed on them. If, at any time any of the instructions are unclear, or you do not understand what is being asked of you, please feel free to ask the researcher running the session. Please remember that all information you provide is completely anonymous and confidential. Please be honest when answering the questions as the information that you provide for us is extremely valuable and may help us to answer some very important questions. Please keep in mind that you do not have to answer any question that you do not feel comfortable answering, but also remember that these questionnaires are anonymous and confidential and that your name will not be tied to any of the information that you provide.

Appendix H1

RESEARCH PARTICIPANT DEBRIEFING FORM

Title: An Investigation of Indirect Aggression and Victimization in Late Adolescence

Principle Researcher: Lindsey Leenaars	leenaars@ualberta.ca	893-2389
Supervisor: Dr. Christina Rinaldi	crinaldi@ualberta.ca	492-7471

Thank you for participating in this study and helping us learn more about the experiences of first year university students. By answering the questionnaires, you provided information regarding indirect aggression and victimization, gender role orientation, social representations of indirect aggression, and self-perceptions of behaviour and attitudes.

More specifically, you contributed to a growing body of research examining the factors associated with indirect aggression and victimization. Aggression, harassment, and bullying by peers are all major problems that many individuals face everyday in their schools and in their communities. Aggression and bullying affect not only the victim and aggressor but the entire community including peers, teachers, and parents. Indirect aggression is one of the most underreported types of bullying in schools (Owens, Shute, & Slee, 2000). Indirect aggression is the manipulation of others and the social network in order to harm the victim (Lagerspetz, Bjorkqvist, & Peltonen, 1988).

The main purpose of this study is to provide a more comprehensive understanding of indirect aggression and victimization in a late adolescent population by employing a multimethod, multidimensional approach. Such an approach will be employed in order to move beyond the limitations encountered by previous studies, which have not considered the possibility of eliciting rich data from participants. Specifically, the goal of the present study is to determine whether indirect aggression/victimization may be better predicted by sociocultural variables including gender role orientation and social representations of indirect aggression than solely by biological sex. Further, to explain and predict indirect aggression and victimization better, aggressors' and victims' self-perceptions of personality and behaviour will be investigated, and emergent, predictive patterns will be determined.

If you have any questions or want a summary of the results, you can contact the principle researcher. Thank you once again for your time and contribution to this research.

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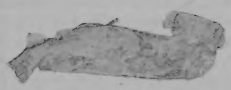

Appendix H2

RESEARCH PARTICIPANT DEBRIEFING FORM

Title: An Investigation of Indirect Aggression and Victimization in Late Adolescence/ Emerging Adulthood

Principle Researcher: Lindsey Leenaars leenaars@ualberta.ca 893-2389
Supervisor: Dr. Christina Rinaldi crinaldi@ualberta.ca 492-7471

Thank you for participating in this study and helping us learn more about the experiences of first year university students. By answering the questionnaires, you provided information regarding indirect aggression and victimization, gender role orientation, social representations of indirect aggression, and self-perceptions of behaviour and attitudes.

More specifically, you contributed to a growing body of research examining the factors associated with indirect aggression and victimization. Aggression, harassment, and bullying by peers are all major problems that many individuals face everyday in their schools and in their communities. Aggression and bullying affect not only the victim and aggressor but the entire community including peers, teachers, and parents. Indirect aggression is one of the most underreported types of bullying in schools (Owens, Shute, & Slee, 2000). Indirect aggression is the manipulation of others and the social network in order to harm the victim (Lagerspetz, Bjorkqvist, & Peltonen, 1988).

The main purpose of this study is to provide a more comprehensive understanding of indirect aggression and victimization in a late adolescent/ emerging adulthood population. Specifically, the goal of the present study is to determine whether indirect aggression/victimization may be better predicted by sociocultural variables including gender role orientation and social representations of indirect aggression than solely by biological sex. Further, to explain and predict indirect aggression and victimization better, aggressors' and victims' self-perceptions of personality and behaviour will be investigated, and emergent, predictive patterns will be determined.

If you have any questions or want a summary of the results, you can contact the principle researcher. Thank you once again for your time and contribution to this research.

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